

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. 00-014  
FOR  
COACHELLA VALLEY WATER DISTRICT, OWNER/OPERATOR  
MID VALLEY RECLAMATION FACILITY NO. 4  
Thermal - Riverside County

Location of Discharge: Sections 2 and 11, T7S, R8E, SBB&M

MONITORING

1. The collection, preservation and holding times of all samples shall be in accordance with United States Environmental Protection Agency approved procedures. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.
2. Samples shall be collected at the location specified in the permit. If no location is specified, sampling shall be conducted at the most representative sampling point available.
3. If the facility is not in operation, or there is no discharge during a required reporting period, the discharger shall forward a letter or indicate on the required monthly monitoring report to the Regional Board indicating that there has been no activity during the required reporting period.

INFLUENT MONITORING

The wastewater influent to the treatment facility shall be monitored as follows:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
20° C CBOD <sub>5</sub>	mg/L <sup>1</sup>	24-Hr. Composite	Weekly
Suspended Solids	mg/L	24-Hr. Composite	Weekly

EFFLUENT MONITORING

Effluent wastewater from the facility shall be tested. The sampling station shall be established at a suitable location, where representative samples of the wastewater shall be collected and monitored for the following constituents:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Daily Effluent Discharge	MGD <sup>2</sup>	Flowmeter Reading	Daily <sup>3</sup>
Settleable Matter	ml/L <sup>4</sup>	Grab at Peak Flow	Twice-Weekly

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<sup>1</sup> mg/L milligrams per Liter

<sup>2</sup> MGD - Million Gallons-per-Day

<sup>3</sup> Reported monthly with monthly average daily flow

<sup>4</sup> m/L - milliliters-per-Liter

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Suspended Solids	mg/L	24-Hr. Composite	Twice-Weekly
20° C CBOD <sub>5</sub>	mg/L	24-Hr. Composite	Weekly
pH	pH Units	Grab	Daily <sup>5</sup>

In addition, a representative sample from the flow shall be collected prior to discharge from the outfall and shall be monitored for constituents/parameters indicated below:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Temperature	°F	Grab	Daily <sup>5</sup>
Fecal Coliform	MPN <sup>6</sup> /100 ml	Grab	Twice Weekly
Chlorine Residual <sup>7</sup>	mg/L	Grab	Daily <sup>8</sup>
Total Dissolved Solids	mg/L	24-Hr. Composite	Monthly
Nitrates	mg/L	24-Hr. Composite	Monthly
Ammonia Nitrogen	mg/L	24-Hr. Composite	Monthly
Total Nitrogen	mg/L	24-Hr. Composite	Monthly
Total Phosphate	mg/L	24-Hr. Composite	Monthly
Sulfates	mg/L	24-Hr. Composite	Quarterly
Chloride	mg/L	24-Hr. Composite	Quarterly
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	Quarterly
Volatile Organic Compounds	µg/L <sup>9</sup>	Grab	Quarterly
Oil and Grease	mg/L	24-Hr. Composite	Annually

Should the discharger need to install additional outfall lines in the future to meet necessary discharge capacity, then the constituents/parameters being monitored for the above total combined flow shall be done likewise for each outfall line.

<sup>5</sup> Daily (excluding holidays and weekends)

<sup>6</sup> MPN - Most Probable Number

<sup>7</sup> The discharger may monitor for dechlorinating agent residual and report residual chlorine as nondetectable if the dechlorinating agent is present

<sup>8</sup> Daily (excluding holidays and weekends)

<sup>9</sup> µg/L - micrograms-per-Liter

## RECEIVING WATER MONITORING

All receiving water samples shall be grab samples. Sampling stations shall be as follows:

<u>Station</u>	<u>Description</u>
R-1	Not to exceed 100 feet upstream from the point of discharge. A greater distance may be acceptable provided the discharger submits proper justification that the prescribed distance is inaccessible.
R-2	Not to exceed 200 feet downstream of the discharge pipe outlet at a point where the plume would be expected.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Station</u>	<u>Sampling Frequency</u>
Temperature	°F	Grab	R-1, R-2	Monthly
Chlorine Residual <sup>10</sup>	mg/L	Grab	R-1, R-2	Monthly
Dissolved Oxygen	mg/L	Grab	R-1, R-2	Monthly
Nitrates	mg/L	Grab	R-1, R-2	Monthly
Ammonia	mg/L	Grab	R-1, R-2	Monthly
Total Nitrogen	mg/L	Grab	R-1, R-2	Monthly
Total Phosphate	mg/L	Grab	R-1, R-2	Monthly
PH	pH Units	Grab	R-1, R-2	Monthly
Hardness (CaCO <sub>3</sub> )	mg/L	Grab	R-1, R-2	Monthly

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions at Stations R-1 and R-2. Attention shall be given to the presence or absence of:

- |                                 |   |
|---------------------------------|---|
| a. Floating or suspended matter | d. Visible film, sheen or coating         |
| b. Discoloration                | e. Fungi, slime, or objectionable growths |
| c. Aquatic life                 | f. Potential nuisance conditions          |

Notes on receiving water conditions shall be summarized in the monitoring report.

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<sup>10</sup> The discharger may monitor for dechlorinating agent residual and report residual chlorine as nondetectable if the dechlorinating agent is present.

## OPERATION AND MAINTENANCE

The discharger shall report the following:

<u>Activity</u>	<u>Reporting</u>
To inspect and document any operation/maintenance problems by inspecting each unit process	Annually
The amount of chlorine and dechlorinating agent shall be monitored and measured daily (excluding holidays and weekends). Chlorine and the dechlorinating agent shall be measured in pounds per day.	Monthly

## SLUDGE MONITORING

The discharger shall report quarterly on the quantity, location and method of disposal of all sludge and similar solid material being produced at the reclamation facility.

The sludge that is generated at the reclamation facility and removed for disposal shall be sampled and analyzed for the following:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Arsenic	mg/Kg <sup>11</sup>	Grab	Annually
Cadmium	mg/Kg	Grab	Annually
Nickel	mg/Kg	Grab	Annually
Copper	mg/Kg	Grab	Annually
Lead	mg/Kg	Grab	Annually
Mercury	mg/Kg	Grab	Annually
Molybdenum	mg/Kg	Grab	Annually
Selenium	mg/Kg	Grab	Annually
Zinc	mg/Kg	Grab	Annually
Fecal Coliform	MPN/gram	Grab	Annually

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<sup>11</sup> mg/Kg - milligrams-per Kilogram

## EFFLUENT TOXICITY TESTING

The discharger shall conduct chronic toxicity testing on the effluent as follows:

<u>Test</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Test</u>
Chronic Toxicity	tu <sub>c</sub>	Composite	Quarterly
Acute Toxicity	Percent Survival	Composite	Quarterly

Both test species given below shall be used to measure acute and chronic toxicity:

<u>Species</u>	<u>Effect</u>	<u>Test Duration (Days)</u>	<u>Reference</u>
Fathead Minnow (Pimephales promelas)	Larval Survival	7	EPA/600/4-91/002 (chronic) EPA/600/4-90/027F (acute)
Water Flea (Ceriodaphnia dubia)	Survival; Number of Young	7	EPA/600/4-91/002 (chronic) EPA/600/4-90/027F (acute)

Toxicity Test Reference: Methods for measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition, EPA-600-4-90-027F, August 1993. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water for Freshwater Organisms, EPA-600-4-91-002, July 1994.

Dilution and control waters may be obtained from an unaffected area of receiving waters. Standard dilution is an option and may be used if the above source is suspected to have toxicity greater than 1.0 tu<sub>c</sub>. The sensitivity of the test organism to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

Chronic toxicity shall be expressed and reported as toxic units (tu<sub>c</sub>) where:

$$tu_c = 100/NOEC$$

and the No Observed Effect Concentration (NOEC) is expressed as the maximum percent effluent of test water that causes no observed effect on a test organism, as determined in a critical life stage toxicity test (indicated above).

Acute toxicity may be calculated from the results of the chronic toxicity test described above and shall be reported along with the results of each chronic test. Acute toxicity shall be expressed as percent survival of test organism over a ninety-six hour period using 100% effluent.

## REPORTING

1. The discharger shall report the results of acute and chronic toxicity testing as determined through standard toxicity protocols using 100% effluent.
2. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data should be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements.
3. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurement(s);
  - b. The individual(s) who performed the sampling or measurement(s);
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or method used; and
  - f. The results of such analyses.
4. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this monitoring report.
5. Each report shall contain the following statement:

“I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.”
6. A duly authorized representative of the discharger may sign the documents if:
  - a. The authorization is made in writing by the person described above;
  - b. The authorization specified an individual or person having the responsibility for the overall operation of the regulated disposal system; and
  - c. The written authorization is submitted to the Regional Board's Executive Officer.
7. Report of any failure in the waste disposal system shall be as described in Provision No. 26.
8. Report any instances of non-compliance with the requirements of this Board Order in the monthly monitoring report.
9. Daily, weekly, and monthly monitoring reports shall be submitted to the Regional Board by the 15<sup>th</sup> day of the following month. Quarterly monitoring reports shall be submitted by January 15, April 15, July 15, and October 15 of each year. Annual reports shall be submitted by January 15 of each year.

10. Submit monitoring reports to:

California Regional Water Quality Control Board  
Colorado River Basin Region  
73-720 Fred Waring Drive, Suite 100  
Palm Desert, Ca. 92260

ORDERED BY: \_\_\_\_\_  
Executive Officer

\_\_\_\_\_ May 10, 2000 \_\_\_\_\_  
Date